

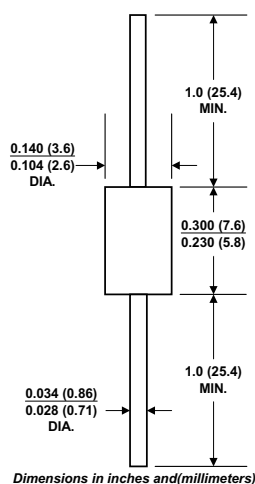
Technical Data
Data Sheet 1253, Rev. A

TWO TERMINAL THYRISTOR SERIES
SURFACE MOUNT SMB AND AXIAL LEAD DO-15
TWO TERMINAL THYRISTOR SURGE SUPPRESSOR

FEATURES:

- UL94V-0 Flammability Classification
- ESD Protection >40 kilovolts
- Low Capacitance for T1/E1 Trunk and Line Card Application
- High Surge Current Capability
(See Electrical Characteristics)
- Peak Off-State Voltage from 90 to 360 volts
- Meet IEC61000-4-4 & -5 Industry Requirement
- Provides Protection in Accordance with FCC Part 68, UL1459, Bellcore 1089, ITU-TK. 20 & K. 21

DO-204AC (DO-15)

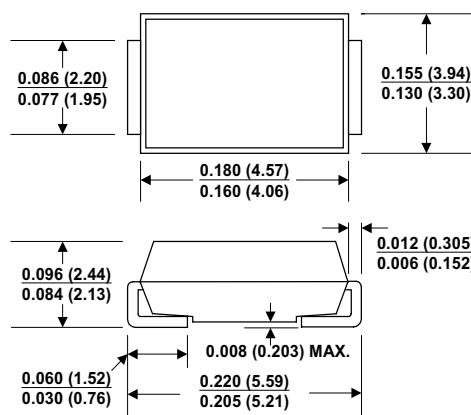


Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDEC DO-15 Molded plastic over passivated Junction
Terminals: Tin Plated Axial leads, solderable per MIL-STD-750, Method 2026
Mounting Position: Any
Weight: 0.015 ounce, 0.4 gram

DO-214AA (SMB J-Bend)



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDEC DO-214AA Molded plastic over passivated junction
Terminal: Solder plated, solderable per MIL-STD-750, Method 2026
Standard Packaging: 12mm tape (EIA STD RS-481)
Weight: 0.003 ounce, 0.093 gram

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PART NUMBER	MARKING CODE		REPETITIVE PEAK OFF-STAGE VOLTAGE V_{DRM} (VOLTS)	SWITCHING VOLTAGE @100V/ μ s V_s (VOLTS)	MINIMUM HOLDING CURRENT $dI/dt=1A/ms$ I_H (mA)	SWITCHING CURRENT I_s (mA)	SURGE RATINGS I_{PP} 10*1000 μ S (Amps)	ON-STAGE CURRENT I_T (A)	TYPICAL CAPACITANCE @50V,1MHz (pF)
	FOR AXIAL DO-15 PACKAGE	FOR SMB PACKAGE							
SP1100SA	SP1100SAL	GF	90	130	150	800	50	1	60
SP1300SA	SP1300SAL	GG	120	160	150	800	50	1	40
SP1500SA	SP1500SAL	GH	140	180	150	800	50	1	40
SP1800SA	SP1800SAL	GI	160	220	150	800	50	1	40
SP2300SA	SP2300SAL	GJ	190	260	150	800	50	1	30
SP2600SA	SP2600SAL	GK	220	300	150	800	50	1	30
SP3100SA	SP3100SAL	GL	275	350	150	800	50	1	30
SP3500SA	SP3500SAL	GM	300	400	150	800	50	1	30
SP4000SA	SP4000SAL	GO	360	450	150	800	50	1	30
SP1100SB	SP1100SBL	GS	90	130	150	800	80	1	100
SP1300SB	SP1300SBL	GT	120	160	150	800	80	1	70
SP1500SB	SP1500SBL	GU	140	180	150	800	80	1	70
SP1800SB	SP1800SBL	GV	160	220	150	800	80	1	70
SP2300SB	SP2300SBL	GW	190	260	150	800	80	1	50
SP2600SB	SP2600SBL	GX	220	300	150	800	80	1	50
SP3100SB	SP3100SBL	GY	275	350	150	800	80	1	40
SP3500SB	SP3500SBL	GZ	300	400	150	800	80	1	40
SP4000SB	SP4000SBL	GN	360	450	150	800	80	1	40
SP1100SC	SP1100SCL	HF	90	130	150	800	100	1	100
SP1300SC	SP1300SCL	HG	120	160	150	800	100	1	70
SP1500SC	SP1500SCL	HH	140	180	150	800	100	1	70
SP1800SC	SP1800SCL	HI	160	220	150	800	100	1	70
SP2300SC	SP2300SCL	HJ	190	260	150	800	100	1	50
SP2600SC	SP2600SCL	HK	220	300	150	800	100	1	50
SP3100SC	SP3100SCL	HL	275	350	150	800	100	1	40
SP3500SC	SP3500SCL	HM	300	400	150	800	100	1	40
SP4000SC	SP4000SCL	HS	360	450	150	800	100	1	40

Maximum Off-State Current @ V_{DRM} : 5 μ A

Maximum On-State Voltage @ I_T : 5 Volts

For AXIAL devices, use suffix L (e.g. P3100SAL). Electrical characteristics apply in both AXIAL and Surface Mounted Devices.

Fig.1 Pulse Wave Form Example

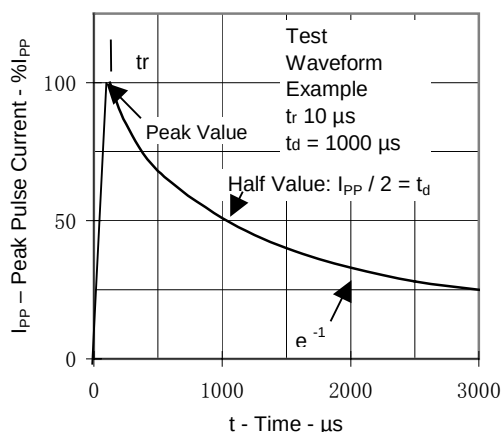
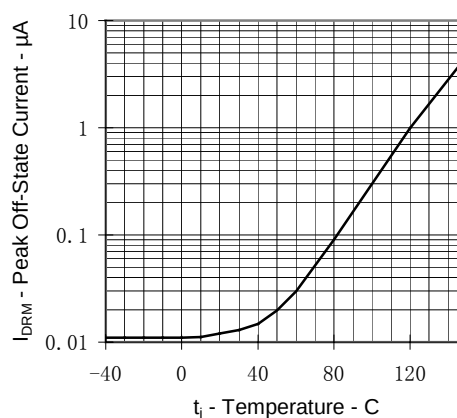


Fig.2 Typical Peak Off-State Current vs Junction Temperature



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Fig.3 Typical On-State Current vs On-State Voltage

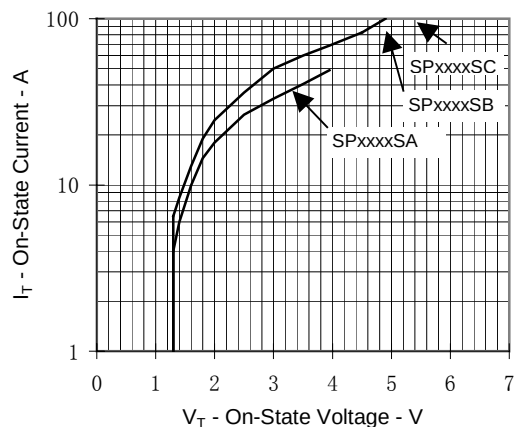


Fig.4 Typical Holding Current Vs Junction Temperature

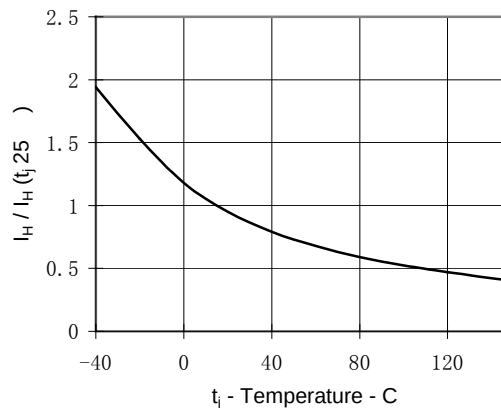


Fig.5 Typical normalized V_S vs Junction Temperature

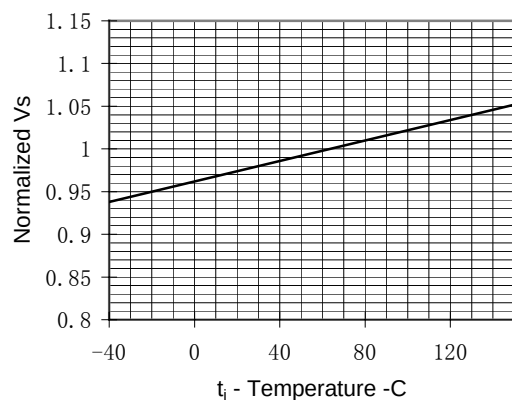


Fig.6 On-State Current vs Surge Current

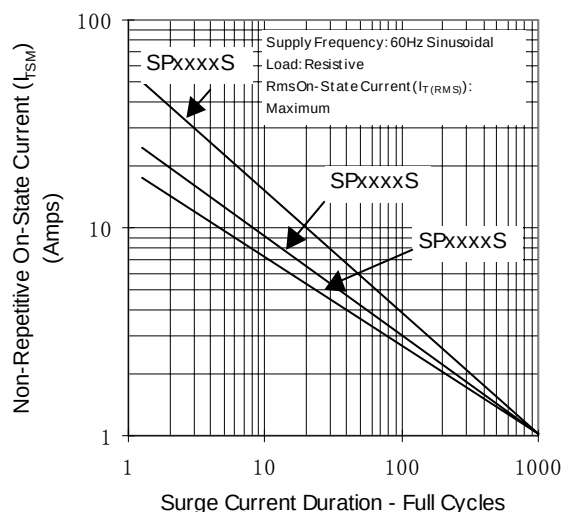


Fig.7 V - I Characteristics Curve

